Remarks

Claim 12 is pending and stands rejected in Examiner's Office Action dated June 17, 2007 under 35 U.S.C. § 103 for obviousness on the basis of the combination now of four references: Norman 6,674,259, in view of BOTBALL, US published patent application 2002/0155884 A1 to Updike, and Roberts 6,599,128.

For the reasons discussed below, the present rejection still fails to make a prima facie case, and the rejection should be withdrawn. For convenience of reference, the pending claim is reproduced in the attached appendix, wherein each limitation is numbered.

Discussion

1. The office action fails to make a prima facie case for rejection because it fails to address all the claim limitations; none of the references teaches a scoring system for ranking robotics teams as a result of a series of matches involving shifting alliances.

In rejecting a claim for obviousness, it is required to address all limitations of the claim. On this subject, MPEP § 2143.03 quotes *In re Wilson*, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970): "All words in a claim must be considered in judging the patentability of that claim against the prior art." See also *In re Royka*, 190 F.2d 981 (CCPA 1974) (to establish a prima facie obviousness rejection, all of the claim features must be taught or suggested by the prior art). The claim limitation are not options for the Examiner to consider. The law requires that all of the claim limitations must be addressed.

The office action fails to identify prior art for key limitations of the pending claim. In particular, claim 12 is directed to a novel scoring system in which the winning alliance's raw score is enhanced by a function of the raw score of the losing alliance. See claim 12, appearing in the Appendix, ¶5. The novel scoring system is used in "*ranking* the teams based on the final scores achieved in matches in which they participate" wherein "the contest is conducted in matches between two competing alliances of the teams, each match including a plurality of teams

from each alliance" (emphasis added). See claim 12, appearing in the Appendix, ¶7 and ¶3)(ii).

Assuming, for the sake of argument, that the Examiner's references can be combined in the manner urged by the Examiner, and assuming further that the references stand for the propositions urged by the Examiner—and we show below that these assumptions are unfounded—nevertheless, the Examiner's combination of references says nothing about using the novel scoring system in "*ranking* the teams based on the final scores achieved in matches in which they participate", wherein "the contest is conducted in matches between two competing alliances of the teams, each match including a plurality of teams from each alliance".

The references say nothing about ranking teams over a series of matches. Let us look at the references cited. Norman et al. says nothing about scoring, and makes only oblique reference to points. Col 8, lines 53 and 56; col 19, line 37. The Examiner's BOTBALL reference is in fact an amalgam of documents. In none of the BOTBALL documents provided by the Examiner, however, can be found any support for the Examiner's statement that "In completing the tasks they are assigned points and at the end the team with the highest point value is declared the winner." Office action, p. 2, number 2. This is utter fiction. Even if it were so, however, there is nothing that discloses ranking teams based on final scores achieved in matches, with each match including an alliance of teams, as required by the claim.

Of the remaining references offered by the Examiner in the combination of references, Updike, is about gambling, not robotic competitions, so it does not provide any further detail about using the novel scoring system in ranking robotics teams based on final scores achieved in matches, with each match including an alliance of teams, as required by the claim. The Roberts reference adds nothing further, since it relates to a game played on a large, fiat playing area, including an annular path having a plurality of color-coded spaces, or alternatively on a game board. Col. 3, lines 34-37, and Abstract. Roberts does not mention matches between shifting alliances, and does mention ranking. Thus Roberts fails to provide any further detail about using the novel scoring system of the claim in ranking robotics teams based on final scores achieved in matches, with each match including an alliance of teams, as required by the claim. In other

words the office action fails to establish a prima facie basis for rejection, and for that reason is improper.

For the record, however, applicant notes again that a portion of the purported BOTBALL reference has nothing to do with BOTBALL but is in fact a description of a FIRST robotics competition. See Examiner's numbered pages 11 et seq. of this reference. The FIRST robotics competition is described in the application pending herein, paragraphs 3 and 4.

2. The office action fails to make a prima facie case for rejection because the Updike reference does not add the loser's score to the winner's score and, because it is a zero sum competition, teaches away from the subject matter claimed.

"The legal concept of *prima facie* obviousness is a procedural tool of examination which applies broadly to all arts. It allocates who has the burden of going forward with production of evidence in each step of the examination process. See *In re Rinehart*, 531 F.2d 1048, 189 USPQ 143 (CCPA 1976); *In re Linter*, 458 F.2d 1013, 173 USPQ 560 (CCPA 1972); *In re Saunders*, 444 F.2d 599, 170 USPQ 213 (CCPA 1971); *In re Tiffin*, 443 F.2d 394, 170 USPQ 88 (CCPA 1971), *amended*, 448 F.2d 791, 171 USPQ 294 (CCPA 1971); *In re Warner*, 379 F.2d 1011, 154 USPQ 173 (CCPA 1967), *cert. denied*, 389 U.S. 1057 (1968). The examiner bears the initial burden of factually supporting any *prima facie* conclusion of obviousness." MPEP § 2142. In the present office action, the examiner has not carried this burden.

As discussed in the previous section, in applying the references cited to the claims, the office action misses key claim limitations, and thus fails to establish a *prima facie* case for obviousness. In the present section, we show that the Updike reference fails to teach any claim limitation herein, and for this additional reason, the office action fails to establish a prima facie case for rejection.

Let us assume, for the moment, as the Examiner would have us believe, that the "points" are the same here as points in a game of skill, such as a robotics competition.

The Examiner, in citing the Updike reference, believes that it is somehow pertinent to the scoring system claimed herein because the Examiner claims that in this reference "the winning points are subtracted from the loser's account and added to the winner's account (see abstract of

the disclosure and paragraph 0011), therefore, the final score of the winner is a function of the raw score of the loser." Office action, page 3, first paragraph [spelling corrected].

The Examiner mischaracterizes the reference and fails to meet the terms of the claim. The claim requires: "determining a final score for a winning alliance in each match, such winning alliance having a raw score exceeding the raw score of the other alliance by enhancing the raw score of the winning alliance by a function of the raw score of the other alliance". See claim 12, ¶5. This does not happen in the reference! Consider carefully the language of the reference. As the Examiner points out, "The winning points are preferably subtracted from the loser's account and added to the winner's account without a "house cut." Updike, Abstract.

Now let us try to parse Updike in relation to the claim. What is the loser's "raw score"? What is the winner's "raw score"? The claim requires "enhancing the raw score of the winning alliance by a function of the raw score of the other alliance". In Updike, there is no "raw score". The concept makes no sense in Updike, which concerns dealing a game of chance, and simply allocates winning points to a winner and subtracting them from the loser. If we were to assume that the loser's account is the loser's raw score, and the winner's account is the winner's raw score, then Updike teaches away from the result here because the winner's account is not increased by the user's account but rather by the winning points, and the winning points are subtracted from the user's account.

In fact, as we have pointed out in prior responses, in Updike, the sum of the changes to winner's and the loser's accounts is zero. What the winner gains, the loser loses. Updike thus teaches a zero sum game, which is conventional, whereas the claimed subject matter is not a zero sum game. In the claimed subject matter, the winner's score is enhanced by a function of the loser's score, so that the loser's score contributes to the enhancement of the winner's score. In Updike, the loser's score makes no contribution whatsoever to the winner's score. Because Updike teaches away from the subject matter herein, it is evidence of non-obviousness. *KSR International Co. v. Teleflex Inc.*, 550 US ___, 127 S.Ct. 1727, 1739-1740, 82 U.S.P.Q.2d 1385 (2007), citing *United States v. Adams*, 383 U.S. 39, 50-51 (1966). For this additional reason, the office action fails to make a prima facie case for rejection.

Moreover, even if we were to assume that the Updike reference somehow teaches the approach of "enhancing the raw score of the winning alliance by a function of the raw score of the other alliance", and it does not, there is nothing in the reference indicating that the scores thus determined are used in ranking all teams over a series of matches between alliances.

3. The office action fails to make a prima facie case for rejection because the combination of references cited is impossible.

As stated in MPEP § 2143.01 II, "[t]he test for obviousness is what the combined teachings of the references would have suggested to one of ordinary skill in the art, and all teachings in the prior art must be considered to the extent that they are in analogous arts. Where the teachings of two or more prior art references conflict, the examiner must weigh the power of each reference to suggest solutions to one of ordinary skill in the art, considering the degree to which one reference might accurately discredit another. *In re Young*, 927 F.2d 588, 18 USPQ2d 1089 (Fed. Cir. 1991)"

The office action depends on the combination of the patent to Norman et al. and BOTBALL, on the hand, which deal with robotics competitions, with Updike, which deals with gambling. The robotics competitions are games of skill. Skill is required in designing and assembling and operating the robots. Under the Examiner's characterization of the robotics references, therefore, points are awarded for demonstration of skill in having the robots perform one or more tasks.

In contrast, gambling, the subject of the Updike reference, involves the making of a bet on the outcome of an event which is uncertain. The Examiner asserts that "it would have been obvious to one of ordinary skill in the art at the time the invention was made to have incorporated Updike's scoring system into Norma[n] et al's robot competition the motivation being to teach fair peer-to-peer competition." Office action p. 3, number 2.

However, the Examiner is mischaracterizing the Updike reference. Updike concerns setting odds for betting purposes, not scoring in competitions involving the exercise of skill. "Apparatus and methods for fair peer-to-peer gambling is disclosed." Abstract, first sentence.

The approach of Updike is applicable to gambling, and uniquely applicable to gambling. Consider the approach laid out in the rest of the abstract of Updike:

> Generally, the system receives a bet statement
>
> from one of two authorized players. Either one of the two
>
> authorized players then enters a whole number percentage
>
> representing his belief that the outcome of the bet statement
>
> will be true. The player entering the risk percentage is
>
> encouraged to be as fair as possible, because the other player
>
> chooses which side of the bet he will take, thereby forcing
>
> the first player into the other position. The amount of points
>
> or money wagered are then automatically determined based
>
> on the risk percentage and a predetermined scaling scheme
>
> which limits potential gambling losses to levels deemed
>
> acceptable by the players. Once the actual outcome is
>
> determined, the winning player is rewarded in inverse proportion
>
> to his risk percentage. In other words, a winning
>
> player who is favored to win receives less than a winning
>
> player who is not favored to win. The winning points are
>
> preferably subtracted from the loser's account and added to
>
> the winner's account without a "house cut."

Abstract, Updike, patent publication US 2002/0155884. Indeed, the process flow of Fig. 5 of this reference tracks the description in the abstract. While this approach may make sense in gambling, how would one follow this approach in a robotics competitions? None of the conditions called for by the reference apply to a robotics competition because there is no betting. There is no bet statement, there is no risk percentage, there is no bet. Robotics competitions involve skill, not betting, and the Updike reference cannot possibly be applied to robotics competitions. The use of the Updike reference in the office action is a linguistic trick, not based on technology, but on words that have no technological context in relation to the subject matter herein claimed. No one of ordinary

skill in the art of robotics competition design has any way of using the content of the Updike reference in robotics competition design.

A modification to a prior art reference that renders the reference unsatisfactory for its intended purpose does not provide a suggestion to make the proposed modification. *In re Gordon*, 733 F.2d 900 (Fed. Cir. 1984). Additionally, MPEP § 2143.01 states that a modification to a prior art reference that changes the principle of operation of the prior art invention being modified is not sufficient to render the claims *prima facie* obvious. Because the combination of Updike with robotics competitions makes no sense, and is impossible, there is no prima facie case for rejection and the rejection is improper.

Conclusion

For the foregoing reasons, the record of prosecution of the present application has been, and remains, utterly devoid of any basis for rejection of the pending claim. The rejection under 35 U.S.C. § 103 is improper and must be withdrawn. Accordingly, claim 12 is in condition for allowance. Reconsideration of the application and issuance of a notice of allowance are respectively requested.

To facilitate examination of the present application, in the event that the Examiner intends any action other than allowance of the pending claim, Applicant requests the courtesy of a personal interview with the Examiner and the Supervisory Patent Examiner to discuss the present application prior to any negative action by the Examiner. Please telephone the undersigned so that such an interview may be scheduled.

Applicant believes that no extension of time is required for timely consideration of this response. In the event that an extension has been overlooked, applicant requests that deposit account number 19-4972 be charged for any fees that may be required for the timely consideration of this application. A request for continuing examination is provided herewith.

Respectfully submitted,

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